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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/912,636	07/24/2001	Elliot Schwartz	05168.P002	6340

40418 7590 10/06/2004

HEIMLICH LAW  
5952 DIAL WAY  
SAN JOSE, CA 95129

EXAMINER
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VU, THONG H

ART UNIT	PAPER NUMBER
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2142

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/912,636

Applicant(s)

SCHWARTZ, ELLIOT

Examiner

Thong H Vu

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

1. Claims 1-27 are pending.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-27 are rejected under 35 U.S.C. § 103 as being unpatentable over Jacob et al [Jacob 6,385,643 B1] in view of Balabine [6,631,417 B1].

3. As per claim 1, the invention discloses a computer network architecture comprising:

a first layer including a transmission control protocol connection;

a second layer including a hyper text transfer protocol connection built upon the first layer;

a first tunneling layer including a first tunneling protocol built upon the second layer to tunnel a message through the hyper text transfer protocol connection; and a multiplexing layer to multiplex a plurality of messages for transmission through the first tunneling layer.

Jacob discloses a distributed processing system using a first layer software and a second or upper layer software layer as TCP/IP [Jacob, the first layer and upper layer, col 7 lines 15-38]. Jacob also teach the message can be transferred using a different protocols [Jacob, TCP, HTTP and software component multiplexes the threads, col 4 lines 44-50;col 8 lines 38-59]

Jacob does not disclose the TCP as the first tunneling layer interact with HTTP as the second tunneling layer. A skilled artisan would have motivation to improve the Jacob apparatus and found Balabine teaching. Balabine discloses a method and apparatus for securing access to a computer wherein a connection manager keeps the TCP/IP connection to web server open and waiting for the HTTP response [Balabine, col 6 lines 27-37]

An Official Notice is taken that the HTTP/TCP architecture is well-known in the art [see Cheriton reference]

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the TCP connection (i.e.: the first tunneling layer) is open to HTTP response/request (i.e.: a second layer) as taught by Balabine into the Jacob's apparatus in order to utilize the first layer and second layer tunneling. Doing so would enable enhanced fault tolerance, efficient scalability, effective load balancing, session control and securing access between client-server over Internet.

4. As per claim 2, Jacob-Balabine disclose the first tunneling protocol opens the HTTP connection between a server and a client [Balabine, col 6 lines 27-37].

5. As per claim 3, Jacob-Balabine disclose a second tunneling layer including a second tunneling protocol built upon the first layer to tunnel a message through the TCP connection [Balabine, col 6 lines 27-37].

6. As per claim 4, Jacob-Balabine disclose the second tunneling protocol is used to open the TCP connection between the server and the client [Balabine, col 6 lines 27-37].

7. As per claim 5, Jacob-Balabine disclose tunneling protocol opens the HTTP connection if the second tunneling protocol is not successful in opening the TCP connection [Balabine, keep the TCP/IP connection remain open, col 5 lines 1-35] .

8. As per claim 6, Jacob-Balabine disclose the messages include binary format messages as inherent feature of digital computer.

9. As per claim 7, Jacob-Balabine disclose the plurality of messages includes a plurality of operational messages and a plurality of administrative messages [Balabine, request message, response message, col 5 lines 54-64].

10. As per claim 8, Jacob-Balabine disclose the operational messages include operational data [Jacob, data values with message, col 7 lines 40-50; col 9 lines 63-67].

11. As per claim 9, Jacob-Balabine disclose the administrative messages can be selected from the group consisting of debug messages, firmware update messages and

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parameter configuration messages [Balabine, request message, response message, col 5 lines 54-64].

12. Claims 10-19, 19-27 contain the similar limitations set forth of apparatus claims 1-

9. Therefore, claims 10-27 are rejected for the similar rationale set forth in claims 1-9.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Thong Vu, whose telephone number is (703)-305-4643. The examiner can normally be reached on Monday-Thursday from 8:00AM- 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Jack Harvey*, can be reached at (703) 305-9705.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-9700.

Any response to this action should be mailed to: Commissioner of Patent and Trademarks, Washington, D.C. 20231 or faxed to :

After Final (703) 746-7238

Official: (703) 746-7239

Non-Official (703) 746-7240

Hand-delivered responses should be brought to Crystal Park 11,2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

**Thong Vu**  
**Patent Examiner**  
**Art Unit 2142**

